#### **BRIEFING SUMMARY SHEET**

DEVELOPMENT ASSESSMENT CASE NUMBER: CD-2009-0005 - Bull Creek PUD

#### REQUEST:

Presentation of a Project Assessment Report for the Bull Creek Planned Unit Development located at 4909, 4923 and 4925 FM 2222 Road, within the Bull Creek and Lake Austin Watersheds.

#### **DEPARTMENT COMMENTS:**

The property is zoned Lake Austin residence (LA), single family residence standard lot (SF-2), and townhouse and condominium residence (SF-6) districts, and includes six legal lots. Existing structures on the property include a single family residence, terraces, swimming areas, and boat docks. The proposed Bull Creek PUD will include a single family residence with accessory structures located on 53.87 acres. Due to the site's unique topography and location overlooking Bull Creek and Lake Austin, and the design elements of this project, the Applicant has requested PUD district zoning. The accessory structures will include, but are not limited to: a guest house, recreation building, barn court/storage building, security building, skyspace building, cabana, and pool. In addition, an olive orchard, gardens, multiple deck areas, terraces, a bird sanctuary, and trails are proposed. The design elements, vegetation enhancement/restoration, wildlife management, planting of trees, and art located along the shoreline also enhance the project site.

The Applicant's proposed base zoning district for the Bull Creek PUD is the LA district. Supplementary uses that are requested as permitted uses include administrative and business offices (not to exceed 7,000 square feet), crop production, food sales, local utility services (including a wind turbine) and urban farm.

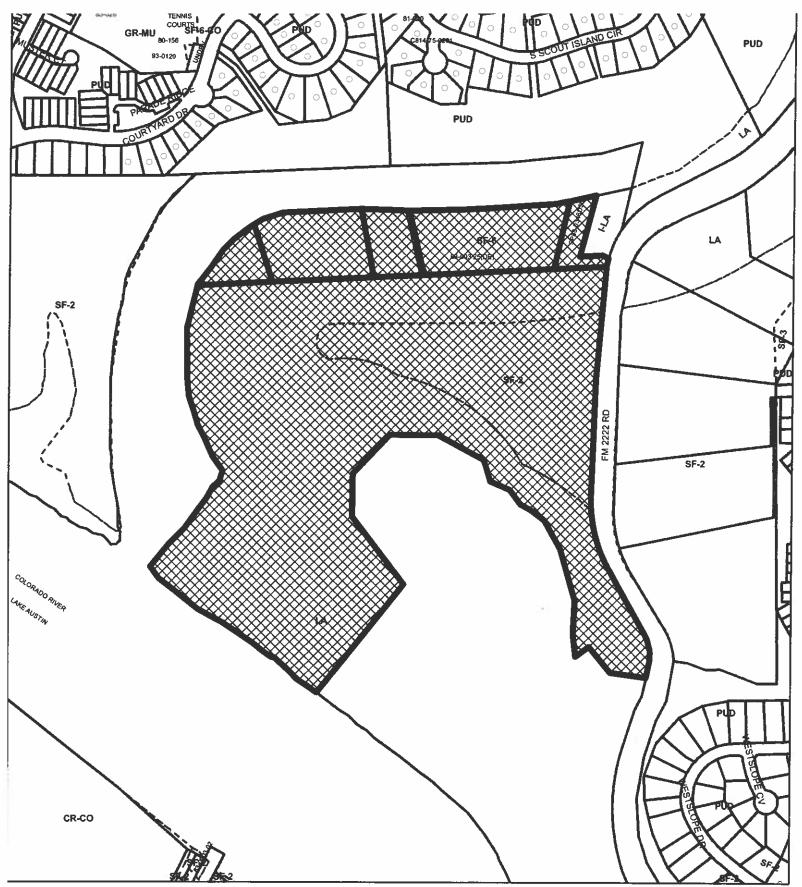
The Staff has reviewed the Applicant's PUD proposal and finds that of the 12 Tier One requirements, eight apply to this project and have been met. Of the Tier Two provisions, the PUD exceeds the open space provisions and two of the environmental provisions, including a reduction in allowable single family density, and employing creative or innovative measures through the preservation and restoration of the natural environment. The Applicant's proposed PUD Plan and site development regulations, along with the City's Project Assessment Report, and the Applicant's response to City's Report are attached.

OWNER/APPLICANT: Booth Family Living Trust (David Armbrust).

AGENT: Armbrust & Brown, L. L. P. (David Armbrust).

CITY COUNCIL BRIEFING DATE: October 15, 2009

ASSIGNED STAFF: Clark Patterson e-mail: clark.patterson@ci.austin.tx.us





1" = 400"



ZONING BOUNDARY



**PENDING CASE** 

OPERATOR: S. MEEKS

#### **ZONING**

ZONING CASE#: CD-2009-0005

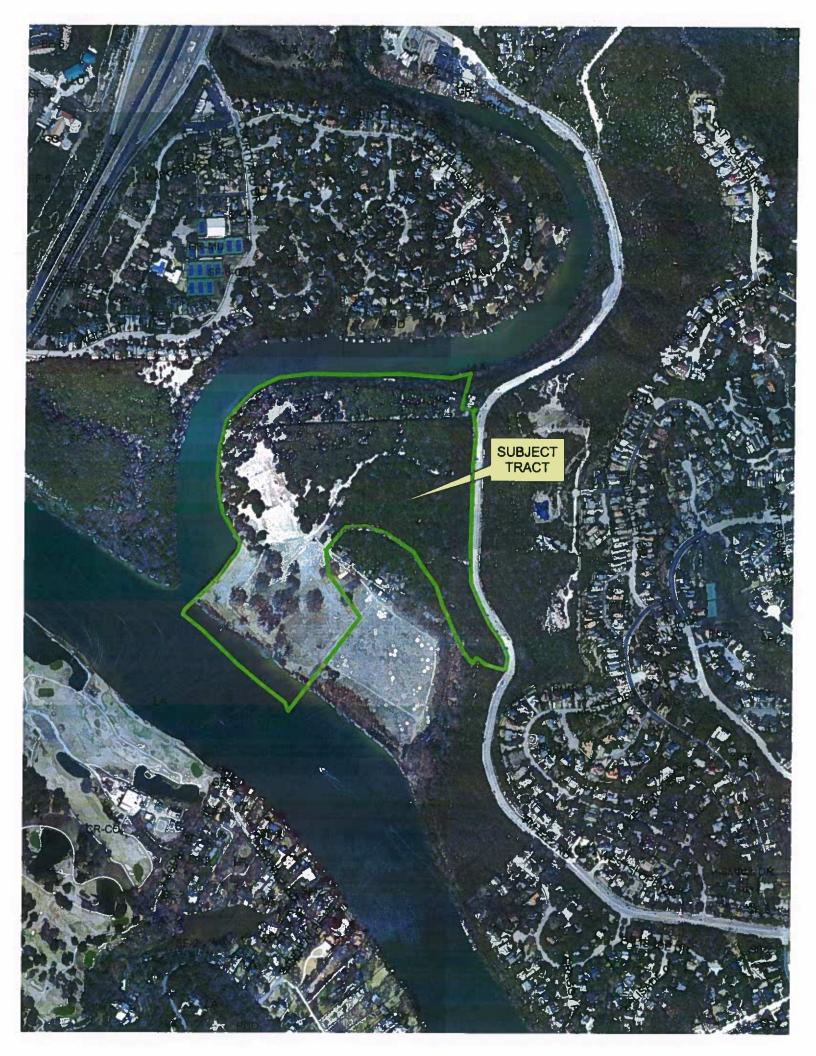
ADDRESS: 4909, 4923 & 4925 RR 2222

SUBJECT AREA: 53.8741 ACRES

GRID: **G29** 

MANAGER: C. PATTERSON





#### ARMBRUST & BROWN, L.L.P.

#### ATTORNEYS AND COUNSELORS

100 CONGRESS AVENUE, SUITE 1300 AUSTIN, TEXAS 78701-2744 512-435-2300

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DAVID B. ARMBRUST (512) 435-2301 darmbrust@abaustin.com

October 6, 2009

#### VIA HAND DELIVERY

Mayor Lee Leffingwell
Councilmember Chris Riley
Councilmember Mike Martinez
Councilmember Randi Shade
Councilmember Laura Morrison
Councilmember Bill Spelman
Councilmember Sheryl Cole
City of Austin
301 W. 2<sup>nd</sup> Street
Austin, TX 78701

Re: Bull Creek Planned Unit Development (PUD) Description

#### Dear Mayor and City Councilmembers:

This letter is submitted on behalf of the applicant in the above-referenced application. The following is a brief summary of the proposed Bull Creek PUD outlining the proposed uses, project description, ecological preservation and conservation efforts, green building, environmental, and cultural benefits.

We are in the process of responding in detail to the comments provided by City staff in response to the Development Assessment, and our initial response will be included in our PUD application.

#### PROPOSED USE

The Bull Creek PUD will consist of one single family residence with accessory structures located on 53.8741 acres of land.

Additional structures that are proposed as accessory uses within the PUD include: a guest house, family recreation building, security/storage building, skyspace art piece, cabana, and pool. In addition, an olive orchard, gardens, multiple deck areas, terraces, boardwalks, a constructed habitat for migratory waterfowl, native prairie and forest restoration, and trails are also proposed

on the site. Existing structures on the property that may remain include: a single family residence, terraces, swimming areas, and boat docks.

#### PROJECT DESCRIPTION

The proposed architecture makes use of responsible strategies to preserve and enhance the natural state of the property. The placement of the main house at the edge of the upper meadow and the heavily wooded area maintains the integrity of both ecological systems and allows for comprehensive restoration to support indigenous fauna. Moreover, this siting limits energy and water consumption through better access to passive cooling. Strategically located at the transition of flatter ground to gently rolling slopes, the change in topography permits the first floor to be sited into the hill, minimizing the scale of the structure and disturbance of the site.

In an attempt to reduce the recreation building's environmental impact, the paddle tennis court and the basketball court are stacked atop one another and then partially sunken into the ground. The adjoining lounge areas are also entirely underground with an opening to the face of the cliff. This strategy not only minimizes the building footprint and minimizes impervious coverage, but it allows the building to maintain a low visual profile along the ridge line: the lounge tunnel hides among the vegetated cliff face and the basketball court sits behind the setback, obscured by the trees and vegetation. The cumulative effective of sinking much of the building below ground also lowers energy consumption by utilizing the earth's thermal mass to reduce temperature fluctuations.

The guesthouse is similarly sensitive, but takes a different and unconventional approach. The structure is essentially a bridge and, as such, the building footprint is a fraction of what a conventionally situated building of the same size would occupy. In addition, rather than impeding the water flow through the site, the building spans a natural drainageway, preserving the unrestricted and natural drainage from the site to Bull Creek that exists currently. In addition, the structure takes advantage of an existing rock terrace constructed many years ago as one of the foundation points. Its adjacency to a proposed vehicular drive lessens impervious surfaces within the property.

The barn and barn court are located in existing flat areas in the eastern portion of the site. This minimizes the disturbance of the surrounding grade and the building is purposefully situated to limit the loss of significant trees on site. As the service building adjacent to Ranch Road 2222, the barn will also focus maintenance equipment at the eastern edge of the property, rather than the interior where native habitat is being restored. Moreover, placement of this structure 'uphill' within the site enables the infiltration of storm water runoff well before its entry into Lake Austin and Bull Creek for water quality purposes.

#### ECOLOGICAL PRESERVATION AND CONSERVATION PLAN

Portions of the property have previously been overgrazed by livestock, which has resulted in compacted soils, bare ground, and patchy cover by undesirable species such as stickers, nettles, and low value nonnative grasses. Ecological preservation and conservation efforts are in progress to orchestrate a series of landscape interventions which will hasten change and push the landscape to recover and transform back into a more diverse woodland, prairie/wildflower meadow, and riparian or stream bank plant community. The result will allow for greater

biodiversity and enhanced habitat quality. An Ecological Preservation and Conservation Plan has been developed for the property, which consists of the following:

- 1. Meadow Rehabilitation -Through plowing, direct seeding of native grasses and forbs, and cultivation of cover crops, it will be possible to suppress noxious weeds, reduce soil compaction, and gradually increase the establishment of native grasses and wildflowers. A robust stand of native grasses and forbs will improve water quality by increasing rainfall absorption rates and filtering runoff. This process was started in 2008 and efforts will continue for four seasons on approximately 12 acres of the site. Detailed reports documenting the efforts to date performed are available upon request.
- 2. Removal of Invasive Tree Species There are considerable numbers of ligustrum, chinaberry, Chinese tallow, and aquatic invasive species that cover the property and line the mouth of Bull Creek. Many of the Chinese tallow located in the flood plain have been removed; however, this is an ongoing project and most efforts have been focused on woody plant species. This program of removing aggressive invasive species will be part of the continuing management plan for the property. As is the case with all properties along the waterfront, the removal of these species can have a huge impact, since they produce seeds which float down stream to other properties.
- 3. Native Hardwood Tree Plantings The Bull Creek PUD property has been dominated by thickets of ash juniper ("cedar") trees. Over the last year, the following trees and shrubs have been planted, with appropriate irrigation, to create diversity to the woodlands areas on the site: 125 15 gallon trees, 6 20 gallon trees, 27 30 gallon trees, 30 65 gallon maple trees (4 inch calipher balled and burlapped), for a total of 188 trees and shrubs. The types of trees and shrubs planted to date include Texas Red Oak, Chinquapin Oak, Bur Oak, Lacey Oak, Cedar Elm, Mexican plum, Possum Haw Holly, Huisache, Mexican Buckeye, Roughleaf Dogwood, Texas Redbud, Texas Mountain Laurel, Uvalde Big Toothed Maple, and Arroyo Sweetwood.

Numerous additional trees are proposed to be planted over the next several years. Trees proposed on site include native and adapted trees which will thrive in the extreme climate of Austin. Species include: Live Oak, Lacey Oak, Texas Red Oak, Chinkopin Oak, Burr Oak, Cedar Elm, Mexican Sycamore, Bald Cypress (adjacent to the water), Mountain Laurel (understory species), Yaupon Holly (understory species).

A private arborist has been engaged to diagnose and treat several high-value oak trees on the property, as well as to watch for oak wilt, which had been identified in the past on this site.

4. Boulder Stabilization – Slope stabilization has been installed where dense stands of invasive species have been removed and in the woodlands areas where some of the cedar or ashe juniper have been thinned to help control erosion. The cut limbs and trunks of the cedar were used as "check logs" in highly eroded areas, or where old road scars needed to be healed. There has been no removal of organic

materials from clearing: everything has been chipped into mulch, and the mulch spread on trails, along tree wells of newly planted trees, and on bare ground. In accordance with the proposed removal of invasive species, additional slope stabilization is proposed.

#### CONSTRUCTED HABITAT FOR MIGRATORY WATERFOWL

Lake Austin's shoreline has been almost completely urbanized with lawns and golf courses, which leave few seasonal feeding areas to attract migratory birds. Lake Austin is too deep to provide migratory waterfowl the opportunity to wade and peck at muddy bottoms for plants, small fish, tadpoles, and insects.

The US Fish and Wildlife Service has expressed interest in the creation of a migratory bird habitat on the Booth property because of its location at the juncture of Bull Creek and Lake Austin. The Service has offered to provide technical expertise with the design, construction supervision, and other advice concerning waterfowl and other wildlife. Subject to applicable permits, berms would be constructed to create one or more separate basins. Inundation of the basins would begin slowly in late August to early September, gradually building up to a maximum depth of approximately 18 inches. The basins would have water levels of varying depth. By the end of January to February, the water levels would be allowed to gradually subside and evaporate. Most migrating waterfowl are gone by the end of April or the first of May. During the rest of the time, the areas would be used as catchment basins for rainwater. Migratory birds gauge the depth of water by the particular reflected glare, and can see to the bottom of the shallow zone, which would attract them to this spot during periods of migration.

#### GREEN BUILDING

Green building elements are proposed to be incorporated into the single family residence and accessory structures. Items presently being studied along with the design of the main house and accessory structures include, but are not limited to the following:

- 1. Green roof on the main house
- 2. Photovoltaic solar panels to generate electricity
- 3. Geothermal based heating and cooling systems for the proposed buildings
- 4. Gray water recycling system, to the extent feasible
- 5. One or more wind turbines for generation of electricity, to the extent feasible

Although the project is single family residential in nature, the City's PUD ordinance uses a commercial standard for calculating an Austin Energy rating. Using this criteria, the proposed project is currently estimated to fall within a three star rating of the PUD Green Building Program's rating system.

#### **ENVIRONMENTAL BENEFITS**

In addition to the innovative ecological preservation and conservation plan, constructed habitat for migratory waterfowl, and green building elements included within this single family project, there are other more traditional environmental benefits from the project. These include the following:

- 1. A reduction of impervious cover and overall density well below that which is otherwise allowed by the code. Less than 15 percent impervious cover is proposed over the entire 53.8741 acre property with far fewer structures than could be constructed under conventional zoning.
- 2. Revegetation and restoration of two acres of land to enhance the spread of water and minimize erosion. These areas will function as rough textured medium to tall height prairie grasses, which slow down and disperse storm water, enhancing the water quality along the drainage feature that runs through the property.

#### PUBLIC ARTWORK

The project presently proposes to incorporate at least two art installations which may be seen publicly from Lake Austin or Bull Creek. The first piece has been commissioned by artist James Turrell, who specializes in skyspace structures which utilize natural light, combined with a complex lighting system, to create visually pleasing art.

In addition, the owners have proposed to commission artist Jorge Pardo to assist with the remodeling of one of the existing boat docks. Jorge Pardo is well known for his work in maintaining the functionality of everyday items, but at the same time increasing their aesthetic value as works of art.

#### **SUMMARY**

Suzanne and David Booth, as the applicants for this PUD, are conservationists in the truest sense of the word. As a result of their extraordinary measures to preserve and protect the property, we believe their proposed development under a PUD zoning classification will be far superior than what could be achieved under conventional zoning.

If you have any questions or need additional information, please do not hesitate to contact me at (512) 435-2301 or Lynn Ann Carley at (512) 435-2378.

Very truly yours,

David B. Armbrust

cc: Suzanne and David Booth

Greg Guernsey

Clark Patterson

Randy Hagman

Tony Shaleesh

Jana Rice

Nathan Lentz

David Rodriguez

Stephanie Grotta

Travis van Liere

Jill Nokes

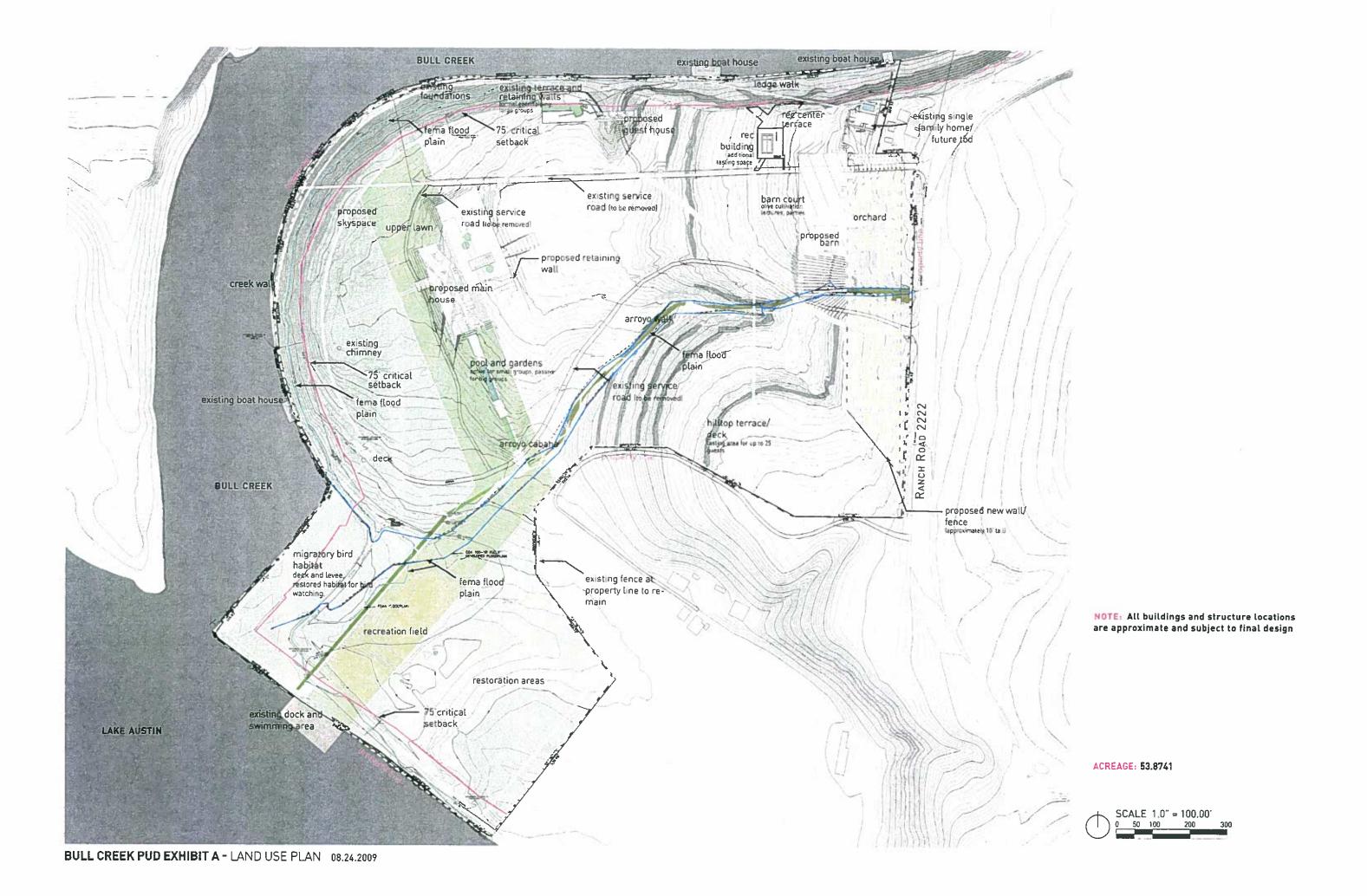
# BULL CREEK PUD EXHIBIT C – CODE MODIFICATIONS

| Section 25-2, Division 5, Subpart B.2.3.1 Section 25-2, Division 5, Subpart C.3.1 Section 25-2-492 Section 25-2-551(B)(2) | Describes Tier One minimum requirements that PUDs must adhere to  Describes land use plan amendment and expiration requirements  Lists the permitted, conditional, and prohibited uses for the LA zoning district.  Describes shoreline setback requirements for LA zoning | PROPOSED CODE MODIFICATION  Modifies Tier One requirements as shown in Exhibit D.  Clarifies that including additional accessory uses and structures may be approved administratively by the Director, and does not constitute a substantial amendment.  Modifies the permitted land uses allowed on the property, as described in Exhibit B.  Modifies the LA district regulations to allow a proposed migratory bird habitat, birdbath facilities, decks, levees, trails, boardwalk, remnant foundation, terraces, security equipment, wiring, and related facilities to be located within the shoreline setback. Also allows maintenance and remodel of existing swimming area, boat docks, walkways, and terraces. |
|---|--|--|
| Section 25-2-551(B)(5) Section 25-2-831(D)  | Describes shoreline setback requirements for LA zoning  Describes accessory uses for a principal residential use   | Modify the accessory use regulations to allow development on gradients that exceed 35 percent. This modification would be applicable to the guest house, which proposes to span over a small area with a gradient over 35 percent, as shown on Exhibits F and G.  Modify the accessory use regulations to allow more than one guest house.   |

| Section 25-2-1173     | Requires a permit for boat dock construction                  | Modifies this requirement so that neither a site plan nor a site plan exemption is required for remodeling of the existing swimming pier and boat docks. This does not affect the requirement to obtain a building permit.  |
|-----------------------|---|---|
| Section 25-5-2(B)(1)  | Describes site plan exemptions                                | Clarify this requirement that a site plan is not required for construction or alteration of a single family residence or its accessory structures (plural).   |
| Section 25-7-92       | Describes encroachment on the floodplain                      | Clarify this requirement to allow a proposed migratory bird habitat, birdbath facilities, decks, levees, trails, boardwalk, remnant foundation, driveway, terraces, ornamental tiles, security equipment, wiring, and related facilities to be located within the FEMA and City of Austin 100 year fully developed floodplain areas. Also allows maintenance and remodel of existing swimming area, boat docks, walkways, and terraces. |
| Section 25-8-42(B)(6) | Describes administrative variances                            | Modify this requirement so that the Director may grant administrative variances to cut and fill of more than eight feet on this property, for locations other than those already granted within this PUD.   |
| Section 25-8-62       | Describes net site area                                       | Modify the requirement to allow areas that have been designated for wastewater irrigation to be included within the net site area calculation.  |
| Section 25-8-64       | Describes impervious cover assumptions                        | Modify the requirement to allow impervious cover to be calculated over the entire property and not on a lot by lot basis.   |
| Section 25-8-261(C)   | Describes requirements within the Critical Water Quality Zone | Modify the requirements to allow a proposed migratory bird habitat, birdbath facilities, decks, levees, trails, boardwalk, remnant foundation, terraces, ornamental tile, security equipment, wiring, and related facilities to be located within the CWQZ, as shown in Exhibit A. Also allows maintenance and remodel of existing swimming area, boat docks, walkways, and terraces.   |
| Section 25-8-281(B)   | Describes critical environmental features (CEF)               | Modify the requirements to allow a manmade wetland CEF on a residential lot.  |

| Section 25-8-281(C)(1)         | Describes critical environmental features                       | Modify the requirements to reduce the CEF buffer zone to zero for all manmade wetland CEFs (migratory bird habitat and related facilities).   |
|--------------------------------|---|---|
| Section 25-8-252               | Describes wetland protection                                    | Modify the requirements so they are not applicable to manmade wetland CEFs (migratory bird habitat and related facilities).   |
| Section 25-8-301               | Describes requirements to construct a roadway or driveway       | Modify the requirements of this section to allow a small portion of the driveway to be constructed on slopes greater than 15 percent, as shown in Exhibits F and G.   |
| Section 25-8-302(A)(1) and (2) | Describes construction of a building or parking area            | Modify the requirements of this section to allow small portions of building and parking area proposed near the guest house, recreation building, main house, and barn court/storage building to be constructed on slopes greater than 25 percent, as shown on Exhibits F and G.   |
| Section 25-8-302(B)            | Describes construction of a building or parking area            | Modify the requirements to this section to incorporate construction on gradients greater than 25 percent. This will be applicable to portions of the property shown in Exhibits F and G.  |
| Section 25-8-302(B)(2)         | Describes construction of a building or parking area            | Modify the requirement for terracing construction uphill or downhill of a slope with a gradient of more than 15 percent, so that it is optional.  |
| Section 25-8-321               | Describes when clearing of vegetation is allowed and prohibited | Modifies the requirements of this section to allow clearing of vegetation and clearing of trees under 19 inches in diameter for the planting of an olive orchard approximately four (4) acres in size, as shown approximately on Exhibit A.   |
| Section 25-8-341               | Outlines cut requirements                                       | Modifies the requirements of this section to allow cuts to exceed four feet in depth at the following locations: around the main house, for the driveway to the main house, adjacent to the barn court/storage building, adjacent to the guest house, surrounding the recreation building, and for the migratory bird habitat, as shown in Exhibit F. |

| Section 25-8-342 | Outlines fill requirements                                       | Modifies the requirements of this section to allow fills to exceed four feet in depth at the following locations: around the main house, for the driveway to the main house, adjacent to the barn court/storage building, adjacent to the guest house, surrounding the recreation building, and for the migratory bird habitat, as shown in Exhibit F. |
|------------------|--|--|
| Section 25-8-621 | Describes permitting requirements for removal of protected trees | permitting Modifies the requirements of this section to allow the removal of a few 19 removal of inch trees, as shown in Exhibit H. To date, the owner has planted over 180 native species of trees on the property.   |
|                  |  |  |
|                  |  |  |



#### BULL CREEK PUD EXHIBIT B – PERMITTED LAND USES

- 1. Land uses within the LA zoning district shall be permitted uses.
- 2. Additional permitted uses shall include:
- \*Local Utility Services
- \*\*Administrative and Business Offices, not to exceed 7,000 square feet Food Sales Crop Production Urban Farm

<sup>\*</sup>This use includes a wind turbine for the generation of electricity. Size, height, and other design elements shall be allowed as necessary to meet design criteria.

<sup>\*\*</sup>This use is being added to provide office space for the property's management and security staff. In addition, it may serve to provide office space if a future non-profit foundation was required. This space would be an office use accessory to the existing uses.

### BULL CREEK PUD EXHIBIT D – TIER ONE REQUIREMENTS

| SECTION | REQUIREMENT  | COMPLIANCE  |
|---------|--|---|
| A       | Meet objectives of the City code   | Meets. The proposed PUD meets objectives of the City code.  |
| В       | Provide development<br>standards that achieve<br>equal or greater<br>consistency with the<br>general intent for PUDs   | Exceeds. The proposed land use plan is superior, since it will greatly reduce the amount of development that could occur on the property. Current zoning and subdivision regulations allow 23 single family residences and six condominium units, while the proposed plan is for one single family residence with accessory uses.   |
| С       | Provide open space   | Meets. The proposed PUD meets objectives of the City code.  |
| D       | Comply with the City's PUD Green Building Program  | See Exhibit E for list of green building elements proposed to be included within the project. Awaiting determination of the applicability of these standards to a single family residence.  |
| E       | Be consistent with<br>neighborhood plans,<br>NCCDs, historic area and<br>landmark regulations, and<br>compatible with adjacent<br>property and land uses   | Meets. There are no neighborhood plans, NCCDs, historic areas or landmark regulations. However, the proposed project is compatible with the adjacent single family properties.  |
| F       | Provide for environmental preservation and protection relating to air quality, water quality, trees, buffer zones and greenbelt areas, CEFs, soils, waterways, topography, and the natural and traditional character of the land | Exceeds. The proposed project has already planted over 180 native species of trees to revegetate the property. Native grasses are being planted to restore the grassland area to its natural state, while nonnative species of trees have been identified for future removal. The project plans to provide a manmade bird sanctuary at the request of the US Fish and Wildlife Department, in order to provide migratory birds an area to rest. |
| G       | Provide for public facilities<br>and services to support the<br>proposed development   | Not applicable, since the project is for a single family residence with accessory structures.   |
| Н       | Exceed the minimum landscaping requirements  | Meets. The proposed PUD meets objectives of the City code.  |
| I       | Provide for appropriate transportation and mass  | Not applicable, since the project is for a single family  |

|   | transit connections to areas adjacent to the PUD district   | residence with accessory structures.  |
|---|---|---|
| J | Prohibit gated roadways   | Not applicable, since the project is for a single family residence with accessory structures.   |
| K | Protect, enhance, and preserve areas that include structures or sites that are of architectural, historical, archaeological, or cultural significance | Meets. An existing old stone terrace located on the site that was likely used for picnicking and cleaning of fish is proposed to be restored. An existing chimney, which is a remnant of the house that was previously located on the property, is also proposed to be preserved. |
| L | Include at least 10 acres of land   | Meets. The PUD includes approximately 53.8741 acres.  |

#### BULL CREEK PUD EXHIBIT E – PUD SUPERIORITY ELEMENTS

#### **OVERALL**

The proposed land use plan is superior, since it will greatly reduce the amount of development that could occur on the property. Current zoning and subdivision regulations allow 23 single family residences and six condominium units, while the proposed plan is for one single family residence with accessory uses.

#### **OPEN SPACE**

1. While open space is not being provided to the public, since this PUD is for a single family residence with accessory uses, the minimal amount of development on the property is an overall benefit.

#### ECOLOGICAL PRESERVATION AND CONSERVATION PLAN

- 1. Meadow Rehabilitation Native grasses have been planted to restore the grassland area to its natural state. This process was started in 2008 and efforts will continue for four seasons on approximately 12 acres of the site.
- 2. Removal of Invasive Tree Species Non-native species of trees have been removed. However, this is an ongoing project and most efforts have been focused on woody plant species. This program of removing aggressive invasive species will be part of the continuing management plan for the property.
- 3. Native Hardwood Tree Plantings Over the last year, the following trees and shrubs have been planted, with appropriate irrigation, to create diversity to the woodlands areas on the site: 125 15 gallon trees, 6 20 gallon trees, 27 30 gallon trees, 30 65 gallon maple trees (4 inch calipher balled and burlapped), for a total of 188 trees and shrubs. Numerous additional trees are proposed to be planted over the next several years.
- 4. Boulder Stabilization Slope stabilization has been installed where dense stands of invasive species have been removed and in the woodlands areas where some of the cedar or ashe juniper have been thinned to help control erosion. In accordance with the proposed removal of invasive species, additional slope stabilization is proposed.

#### CONSTRUCTED HABITAT FOR MIGRATORY WATERFOWL

The project plans to provide a manmade bird sanctuary at the request of the US Fish and Wildlife Department, in order to provide migratory birds an area to rest.

#### **GREEN BUILDING**

Green building elements are proposed to be incorporated into the single family residence and accessory structures. Items presently being studied along with the design of the main house and accessory structures include, but are not limited to the following:

1. Green roof on the main house

- 2. Photovoltaic solar panels to generate electricity
- 3. Geothermal based heating and cooling systems for the proposed buildings
- 4. Gray water recycling system, to the extent feasible
- 5. One or more wind turbines for generation of electricity, to the extent feasible

Although the project is single family residential in nature, the City's PUD ordinance uses a commercial standard for calculating an Austin Energy rating. Using this criteria, the proposed project is currently estimated to fall within a three star rating of the PUD Green Building Program's rating system. However, the project is awaiting determination of the applicability of the standards to a single family residence.

#### ENVIRONMENTAL

In addition to the innovative ecological preservation and conservation plan, constructed habitat for migratory waterfowl, and green building elements included within this single family project, there are other more traditional environmental benefits from the project. These include the following:

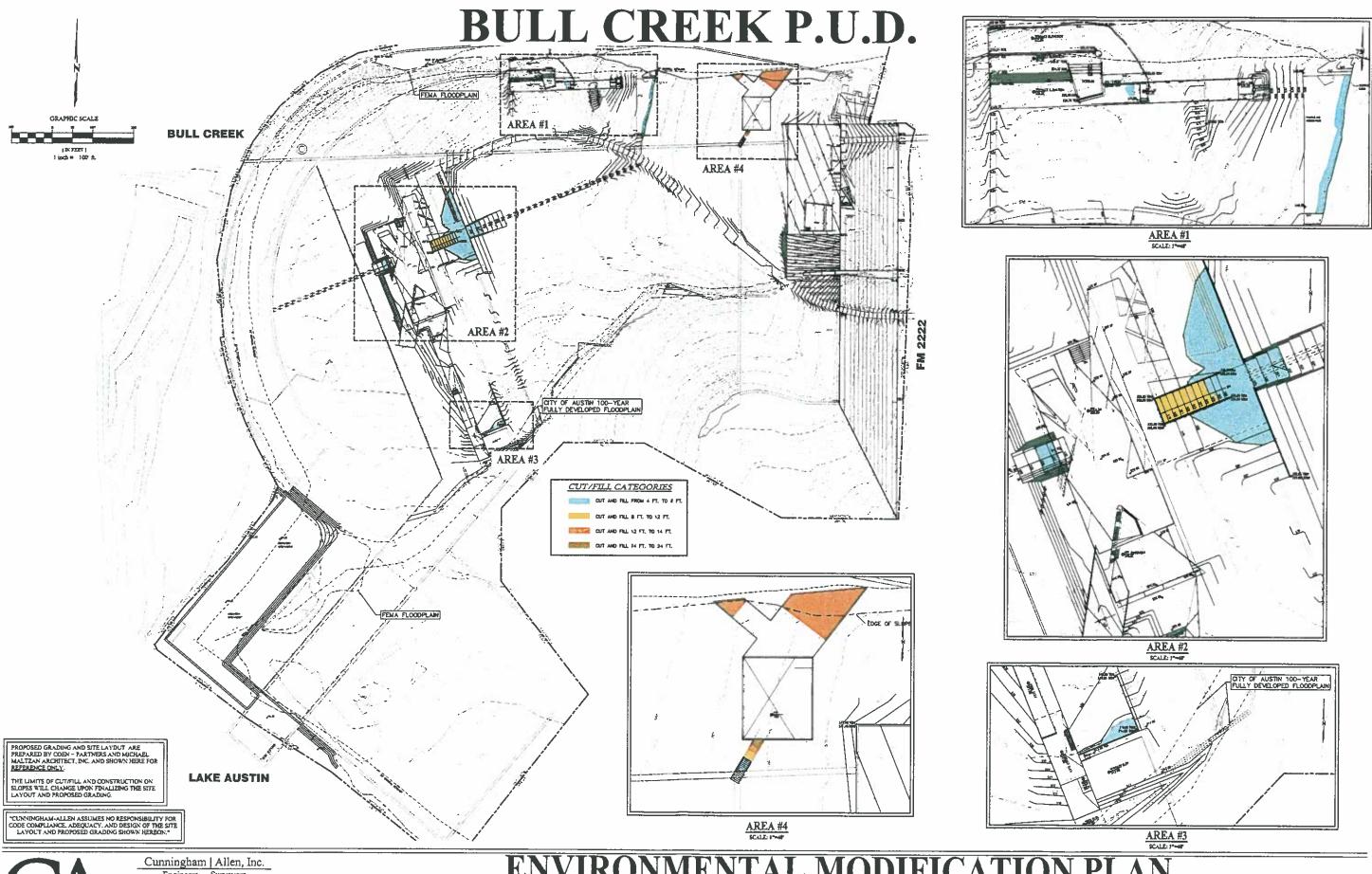
- 1. A reduction of impervious cover and overall density well below that which is otherwise allowed by the code. Less than 15 percent impervious cover is proposed over the entire 53.8741 acre property with far fewer structures than could be constructed under conventional zoning.
- 2. Revegetation and restoration of two acres of land to enhance the spread of water and minimize erosion. These areas will function as rough textured medium to tall height prairie grasses, which slow down and disperse storm water, enhancing the water quality along the drainage feature that runs through the property.

#### PUBLIC ARTWORK

The project presently proposes to incorporate at least two art installations which may be seen publicly from Lake Austin or Bull Creek. The first piece has been commissioned by artist James Turrell, who specializes in skyspace structures which utilize natural light, combined with a complex lighting system, to create visually pleasing art.

In addition, the owners have proposed to commission artist Jorge Pardo to assist with the remodeling of one of the existing boat docks. Jorge Pardo is well known for his work in maintaining the functionality of everyday items, but at the same time increasing their aesthetic value as works of art.

The remaining Tier Two criteria suggestions of great streets, community amenities, transportation, building design, parking structure frontage, affordable housing, accessibility, and local small business do not apply to this project.





Cunningham | Allen, Inc.

Engineers • Surveyors

Tel: (512) 327-2946

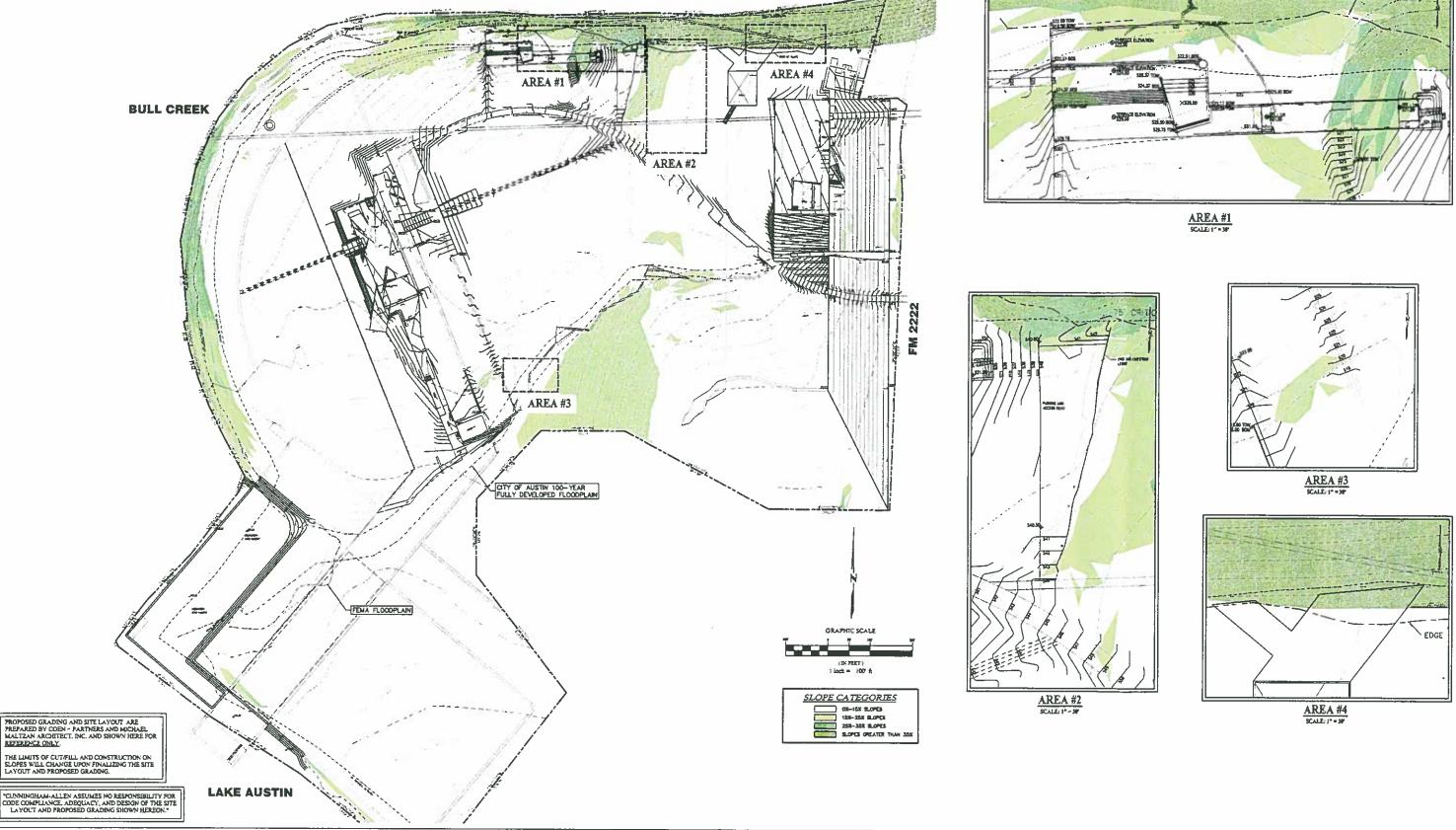
www.cunningham-allen.com

TBPE REG. NO. F-284

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ENVIRONMENTAL MODIFICATION PLAN EXHIBIT F - CUT AND FILL

## BULL CREEK P.U.D.





Cunningham | Allen, Inc.

Engineers • Surveyors

Tel: (512) 327-2946

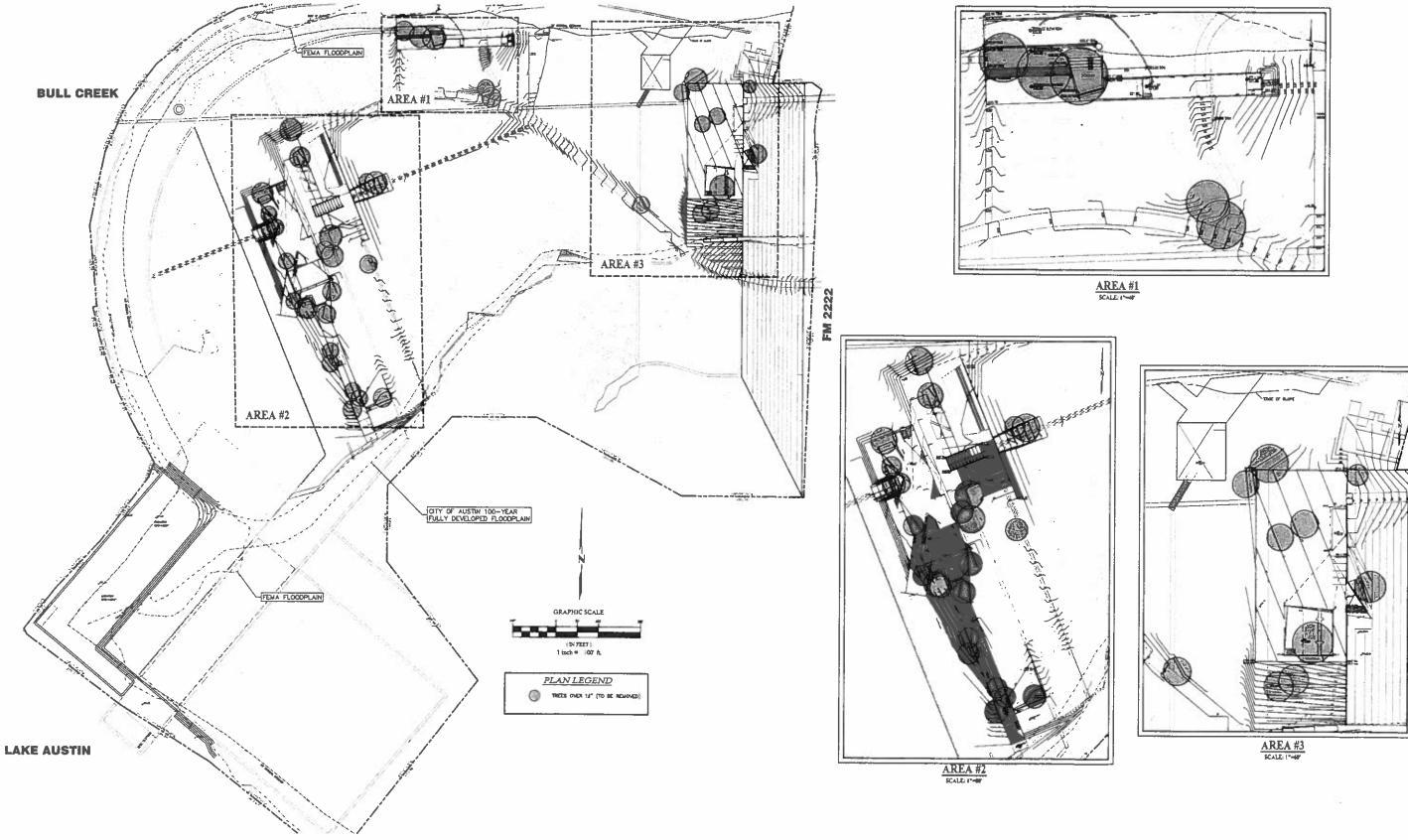
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ENVIRONMENTAL MODIFICATION PLAN EXHIBIT G - CONSTRUCTION ON SLOPES

BULL CREEK P.U.D.





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ENVIRONMENTAL MODIFICATION PLAN EXHIBIT H - TREE PLAN